

SUPERIOR BRASS & ALUMINUM CASTING CO.
4893 Dawn Ave.
East Lansing, MI 48823

ANNUAL REPORT OF HAZARDOUS WASTE EXPORTS FOR CALENDAR YEAR 2013

1. PRIMARY EXPORTER (Consignor)
Name: Superior Brass & Aluminum Casting Co.
EPA ID No: MID005339155
Mailing Address: 4893 Dawn Avenue
City: East Lansing State: MI Zip Code: 48823
Site Address: 4893 Dawn Avenue
City: East Lansing State: MI Zip Code: 48823
2. CALENDAR YEAR: 2013
3. DESIGNATED DISPOSAL FACILITY (Consignee)
Name: Newalta Corporation
Address: 1731 Pettit Road
Fort Erie, Ontario, Canada L2A 5M4
EPA ID No: MIK982753857
4. WASTE SENT to NEWALTA CORPORATION:
Waste Information:
Description of Waste: Waste Bag House Dust/Filters
EPA Hazardous Waste Number: D008 (lead) and D006 (Cadmium)
DOT Proper Shipping Name: Waste Environmentally Hazardous
Substance, Solid, NOS
DOT Hazard Class: 9
DOT ID Code (UN/NA): UN3077

Under:
US EPA Acknowledgement Numbers:
004681/4E/12, (June 02, 2012 – June 01, 2013)
007080/4E/13, (June 08, 2013 – June 07, 2014)

Environment Canada Permit Numbers:
12/04681/IMP, (04 June, 2012 – 01 June, 2013)
13/07080/IMP, (10 June, 2013 – 07 June, 2014)

Shipping Information:
Number of Shipments during Calendar Year: Two (2)
a. On 04/11/13 shipped 1,807 pounds (820 kgs) in 17, 55-gallon drums, via
transporter:
Newalta Corporation
EPA ID No: MIR000046714

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- b. On 09/16/13 shipped 900 pounds (408 kgs) in 7, 55-gallons drums, via transporter:
Newalta Corporation
EPA ID No: MIR000046714
- c. Total Volume of Waste shipped in calendar year 2013 summary:
Two shipments totaling 2707 pounds, (1,228 kgs) in 24, 55-gallon drums.

5. WASTE MINIMIZATION STATEMENT
☐ Not Required this year
☒ Attached

6. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Signed: David Steed Date: 02-26-14

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2012 WASTE MINIMIZATION STATEMENT
FOR WASTE BAGHOUSE DUST

I. PRODUCTION

Waste baghouse dust is the collection of fumes generated by the melting of brass/bronze ingots. Lead and cadmium are the main toxic elements found in the fumes from the melting process of brass and bronze alloys. High concentrations of lead and cadmium in the baghouse dust results in the need to dispose of this material as a hazardous waste. Cadmium is not listed as a compositional element in any of our brass/bronze alloys poured. Cadmium has been found only in trace amounts in these alloys and will be difficult to minimize. Lead will be the main focus of waste minimization. The collected fumes, from the melting of these alloys, passes through a dust collector where dust particles are removed from the air stream. The quantity and quality of this waste is based on the alloys used to meet the customer orders for brass/bronze castings. Based on our customer orders, Superior Brass & Aluminum Casting Co, (Superior Brass) in calendar year 2013 poured eight different brass/bronze alloys.

SUPERIOR BRASS - BRASS/BRONZE ALLOYS POURED IN 2013

ALLOY ASTM DESIGNATION	ALLOWABLE % LEAD IN EACH ALLOY (by weight)
C83600 (85-5-5-5)	4.0 -6.0 %
C86200 (423 MnBr)	Maximum 0.2 %
C86300 (424 MnBr)	Maximum 0.4 %
C86400 (420 MnBr)	0.5 – 1.5 %
C86500 (421 MnBr)	Maximum 0.4 %
C86700 (422 MnBr)	0.5 – 1.5 %
C87600 (Sil Br)	Maximum 0.09 %
C99500 (NDZS specialty)	Maximum 0.09 %

II. MINIMIZATION

(Discussion is based on total part weight)

Superior Brass makes rough cast parts for the water industry, fire hydrants and water valves. Superior Brass continues to address the minimizing of our hazardous waste (lead) through the offering of lower lead alternative alloys to our customers. Initially customer orders for the higher lead alloy C83600 (85-5-5-5) increase by approximately 6% compared to 2012. However as the year went on and new federal drinking water regulation started taking effect, we were able to switch a large amount of parts made of C83600 alloy to lower lead alloy C87600, (Sil Br). The switch in alloys resulted in a reduction in allowable lead in the metal melted from a maximum of 6.0% to a maximum of 0.09%.

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The change in alloys from C83600 to C87600 resulted in an increase of over 250% in C87600 parts poured compared to 2012 values. This is the second year of over 200% increase in C87600 parts poured.

C87600 alloy parts made up over 14% of all our parts poured in 2013. This is up from approximately 4% C87600 parts in 2011.

In addition to a lower lead limit, C87600 while in the process of melting, gives off less fumes (pollutants) than the C83600 alloy. Superior Brass shipped 18% more parts by weight in 2013 than in 2012. Our hazardous waste, baghouse dust, resulting from the Melt Room dust collector showed only an increased of approximately 7.6% in volume. The toxicity of this waste based on both lead and cadmium concentrations in mg/kg decreased 31% and 13% respectfully. For the year 2013 the volume and toxicity of our hazardous waste has decreased.

Superior Brass hopes to continue to reduce the amount of C83600 alloy poured thus continuing to reduce the amount and toxicity of our hazardous waste in the future.

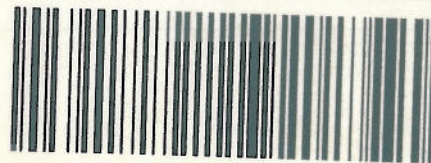
Superior Brass & Aluminum Casting Co.

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East Lansing, Michigan 48823-5694

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